

India steps up efforts on genome sequencing of crops

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Speaking in the Parliament on March 18, 2015, the minister of state for science and technology, Mr Y S Chowdary stated that number of government institutions are involved in the whole genome sequencing of a number of crops including vegetables and fruits. He said that among the vegetable crops, the sequence of tomato and potato have been completed as a part of international consortium and among fruits, mango genome is being sequenced.

Mr Chowdary added that the Department of Biotechnology (DBT) is supporting research programs for using genome information for improving crop yield. It initiated a major program on inducing genome variation by Targeting Induced Local Lesions in Genomes (TILLING) which is being supported as Solanaceae Genome Initiative (SOL) phase II program in next five years. The ultimate objective of this program is to enhance shelf life in tomato and also improve its nutritional quality such as carotenoids and folate. "The DBT is also funding a major research program on Tomato metabolomics where information derived from genome sequence data would be used to enhance vitamins such as carotenoids and folate levels in tomato fruits, he mentioned.

The S&T minister informed that the level of advancement made in this area is quite close to the international standard.